THE CLAIMS:

The following is a listing of the claims as they currently stand.

Claims 1-34 (Canceled).

35. (Previously presented) A hydrothermal electrolytic apparatus comprising:

a reaction cell for electrolyzing an influent containing water and a reducing substance at a temperature of from 100°C to a critical temperature of the influent and at a pressure that allows the water of the influent to be maintained in a liquid phase, said reaction cell including

(i) at least two tubular reaction cells each having a metal inner wall that serves as a cathode, and

(ii) an anode in each of said at least two tubular reaction cells.

36. (Previously presented) The hydrothermal electrolytic apparatus according to claim 35, further comprising:

an influent line having a high-pressure pump for supplying the influent to said reaction cell;

an oxidizer line for supplying an oxidizer to said reaction cell; and

an effluent line for discharging effluent from said reaction cell.

37. (Previously presented) The hydrothermal electrolytic apparatus according to claim 35, further comprising:

a feeder for supplying the influent along with conductive particles into said reaction cell.

38. (Previously presented) The hydrothermal electrolytic apparatus according to claim 37, further comprising:

a separator for separating the conductive particles from effluent discharged from said reaction cell.

39. (Previously presented) The hydrothermal electrolytic apparatus according to claim 38, wherein

said separator comprises a liquid cyclone.

40. (Previously presneted) The hydrothermal electrolytic apparatus according to claim 38, wherein

said separator comprises a filter device.

41. (Previously presented) A hydrothermal electrolytic apparatus comprising:

a reaction cell for electrolyzing an influent containing water and a reducing substance at a temperature of from 100°C to a critical temperature of the influent and at a pressure that allows the water of the influent to be maintained in a liquid phase, said reaction cell including

(i) a first electrode having concentrically arranged cylindrical first side walls and a first connecting member for interconnecting said concentrically arranged cylindrical first side walls, and

(ii) a second electrode having concentrically arranged cylindrical second side walls and a second connecting member for interconnecting said concentrically arranged cylindrical second side walls,

wherein said concentrically arranged cylindrical first side walls and said concentrically arranged cylindrical second side walls are alternately arranged so as to form a channel therebetween for the influent.

42. (Previously presented) The hydrothermal electrolytic apparatus according to claim 41, further comprising:

an influent line having a high-pressure pump for supplying the influent to said reaction cell;

an oxidizer line for supplying an oxidizer to said reaction cell; and

an effluent line for discharging effluent from said reaction cell.

43. (Previously presented) The hydrothermal electrolytic apparatus according to claim 41, further comprising:

a feeder for supplying the influent along with conductive particles into said reaction cell.

44. (Previously presented) The hydrothermal electrolytic apparatus according to claim 41, further comprising:

a separator for separating the conductive particles from effluent discharged from said reaction cell.

45. (Previously presented) The hydrothermal electrolytic apparatus according to claim 44, wherein

said separator comprises a liquid cyclone.

46. (Previously presented) The hydrothermal electrolytic apparatus according to claim 44, wherein

said separator comprises a filter device.

47. (Previously presented) A method for clarifying influent, comprising:

introducing an influent containing water and a reducing substance into a reaction cell that includes

(i) at least two tubular reaction cells each having a metal inner wall that serves as a cathode, and

(ii) an anode in each of said at least two tubular reaction cells; and

supplying a direct current into said reaction cell while a temperature within said reaction cell is within a range of from 100°C to a critical temperature of said influent and a pressure within said reaction cell is such that the water of said influent is maintained in a liquid phase.

48. (Previously presented) The method according to claim 47, further comprising:

introducing an oxidizer into said reaction cell; and

discharging an effluent from said reaction cell.

49. (Previously presented) The method according to claim 47, further comprising:

introducing conductive particles into said reaction cell.

50. (Previously presented) The method according to claim 49, further comprising:

discharging an effluent and at least some of said conductive particles from said reaction cell; and

separating said at least some of said conductive particles from said effluent.

51. (Previously presented) The method according to claim 50, wherein

separating said at least some of said conductive particles from said effluent comprises using one of a liquid cyclone and a filter device to separate said at least some of said conductive particles from said effluent.

52. (Previously presented) A method for clarifying influent, comprising:

introducing an influent containing water and a reducing substance into a reaction cell that includes

(i) a first electrode having concentrically arranged cylindrical first side walls and a first connecting member for interconnecting said concentrically arranged cylindrical first side walls, and

(ii) a second electrode having concentrically arranged cylindrical second side walls and a second connecting member for interconnecting said concentrically arranged cylindrical second side walls,

with said concentrically arranged cylindrical first side walls and said concentrically arranged cylindrical second side walls being alternately arranged so as to form a channel therebetween for said influent; and

supplying a direct current into said reaction cell while a temperature within said reaction cell is within a range of from 100°C to a critical temperature of said influent and a pressure within said reaction cell is such that the water of said influent is maintained in a liquid phase.

53. (Previously presented) The method according to claim 52, further comprising:

introducing an oxidizer into said reaction cell; and

discharging an effluent from said reaction cell.

54. (Previously presented) The method according to claim 52, further comprising:

introducing conductive particles into said reaction cell.

55. (Previously presented) The method according to claim 54, further comprising:

discharging an effluent and at least some of said conductive particles from said reaction cell; and

separating said at least some of said conductive particles from said effluent.

56. (Previously presented) The method according to claim 55, wherein

separating said at least some of said conductive particles from said effluent comprises using one of a liquid cyclone and a filter device to separate said at least some of said conductive particles from said effluent.